IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application:

Application No.:

Filed:

Title:

Commissioner for Patents Washington, D.C. 20231

POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST (REVOCATION OF PRIOR POWERS)

As assignee of record of each of the patent applications listed in the table of attachment A,

REVOCATION OF PRIOR POWERS OF ATTORNEY

all powers of attorney previously given ir each of the listed patent applications are hereby revoked, and

NEW POWER OF ATTORNEY

the following attorneys/agents are hereby appointed to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: I hereby appoint all attorneys of Thomas, Kayden, Horstemeyer & Risley, LLP, who are listed under the USPTO Customer Number shown below as the attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, recognizing that the specific attorneys listed under that Customer Number may be changed from time to time at the sole discretion of Thomas, Kayden, Horstemeyer & Risley, LLP, and request that all correspondence about the application be addressed to the address filed under the same USPTO Customer Number.

000047390
Patent Trademark Office

Please direct all future correspondence and telephone calls to:

Daniel R. McClure, Reg. No. 38,962
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.
100 Galleria Parkway, Suite 1750
Atlanta, Georgia 30339
770-933-9500

Attachment A

| No. | Serial No | TSMC No | Application Title | Filing | Assignment |
|----------|------------|--------------|---|----------|--------------|
| <u> </u> | | | | Date | (Reel/Frame) |
| .1 | 10/687,178 | TS02-776 | New Method To Reduce CD Non- Uniformity In IC Manufacturing | 10/16/03 | 014626/0161 |
| , 2 | 10/820,320 | TS01-1357B | Whole Chip ESD Protection | | 013155/0802 |
| 3 | 10/736,948 | TS03-222 | Dry Film Remove Pre-Filter System | 12/16/03 | 014812/0819 |
| 4 | 10/718,191 | TS03-179 | Novel Encapsulation Method For SBGA | 11/20/03 | 014737/0521 |
| 5 | 10/781,169 | TS03-130/092 | Underfilling Efficiency By Modifying The Substrate Design Of Flip Chips | 02/18/04 | 015007/0129 |
| 6 | 10/690,995 | TS03-129 | Electrically Programmable Polysilicon Fuse With Multiple Level Resistance And Programming | 10/22/03 | 014632/0053 |
| 7 | 10/754,835 | TS02-1398 | Method To Reduce A Capacitor Depletion Phenomena | 01/09/04 | 014897/0115 |
| 8 | 10/822,193 | TS02-1314 | Novel Test Structure For Speeding Stress- Induced Voiding Test And Method Of Using Same | 04/09/04 | 015207/0683 |
| 9 | 10/798,558 | TS02-1226 | Calibration Standard For Critical Dimension Verification Of Sub-Tenth Micron Integrated Circuit Technology | 03/11/04 | 015086/0116 |
| 10 | 10/696,006 | TS02-1033 | Structure For Reducing Leakage Currents And High Contact Resistance For Embedded Memory And Method For Making Same | 10/29/03 | 014660/0568 |
| 11 | 10/762,166 | TS02-716 | Flash Memory Cell With A Unique Split Programming Channel And Reading Channel | 01/21/04 | 014915/0977 |
| 12 | 10/718,877 | TS02-622 | Endurance Improvement By Sidewall Nitridation Of Poly Floating Gate For Nonvolatile Memory Devices Using Substrate Or Drain-Side Erase Scheme | 11/21/03 | 014737/0550 |
| 13 | 10/758,316 | TS03/492 | Method Of Fabricating A Word-Line Spacer For Wide Over-Etching Window On Outside Diameter (OD) And Strong Fence | 01/15/04 | 014907/0961 |
| 14 | 10/793,406 | T802/1156 | Heuristics For Efficient Supply Chain Planning In a Heterogeneous Production Line | 03/04/04 | 015053/0921 |
| 15 | 10/719,722 | TS03/373 | Method To Form Flash Memory With Very Narrow Polysilicon Spacing | 11/21/03 | 014740/0347 |

| Date: | January 25, | 2005 | |
|-------|-------------|------|--|

Chien-Wei (Chris) Chou Director - Intellectual Property Division

ASSIGNEE OF ENTIRE INTEREST

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.

8, Li-Hsin Rd. 6 Hsinchu Science Park Hsinchu, Taiwan 300-77, R.O.C.

ASSIGNEE CERTIFICATION

The certification under 37 C.F.R. §3.73(b) establishing the right of assignee to take action is attached hereto along with documentation evidencing same. Further, in my official position with Taiwan Semiconductor Manufacturing Company, Ltd., I am authorized to sign documents and otherwise act on its behalf in connection with the management and handling of patent applications and other intellectual property matters.

Date: January 25, 2005

Chien-Wei (Chris) Chou

Director - Intellectual Property Division

In re application of: Wu

Application Serial No.: 10/690,995

Filed: December 22, 2003

For: Electrically Programmable Polysilicon Fuse With Multiple Level Resistance And

Programming Patent No.: Issue Date:

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

CERTIFICATE UNDER 37 C.F.R. §3.73(b) ESTABLISHING RIGHT OF ASSIGNEE TO TAKE ACTION

1. The assignee of the entire right, title and interest hereby seeks to take action in the PTO in this matter.

IDENTIFICATION OF ASSIGNEE

2. The assignee of this matter is:

TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.

8, Li-Hsin Rd. 6 Hsinchu Science Park Hsincu, Taiwan 300-77, R.O.C.

PERSON AUTHORIZED TO SIGN

3. Daniel R. McClure Attorney for Assignee

| 4. | A chair | n of title from the inventor(s) to the current assignee is shown below: | | | |
|----------------------------------|---|--|--|--|--|
| | | a. From: Shien-Yang Wu To: Taiwan Semiconductor Manufacturing Company Recorded in PTO: Reel: 014632 Frame: 0053 | | | |
| | b. | From: To: Recorded in PTO: Reel: Frame: | | | |
| | | <u>DECLARATIONS</u> | | | |
| 5. | 5. I, the undersigned, have reviewed all the documents in the chain of title of the | | | | |
| | | application patent | | | |
| matter identified above | | eve and, to the best of my knowledge and belief, title is in the assigned | | | |
| these statemer are punishable | atement nts are n e by fin and that | by declare that all statements made herein of my own knowledge are true is made on information and belief are believed to be true; and further, that made with the knowledge that willful false statements, and the like so made ne or imprisonment, or both, under Section 1001, Title 18 of the United such willful false statements may jeopardize the validity of the application thereon. | | | |
| 7. behalf of the a | , . | person signing below, aver that I am empowered to sign this statement or | | | |
| Tel. No. 770- Customer No. | | THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P. 100 Galleria Parkway, Suite 1750 | | | |
| Docket No. 25 | 52016-2 | Atlanta, Georgia 30339-5948 | | | |
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